

THE BELL SYSTEM TECHNICAL JOURNAL

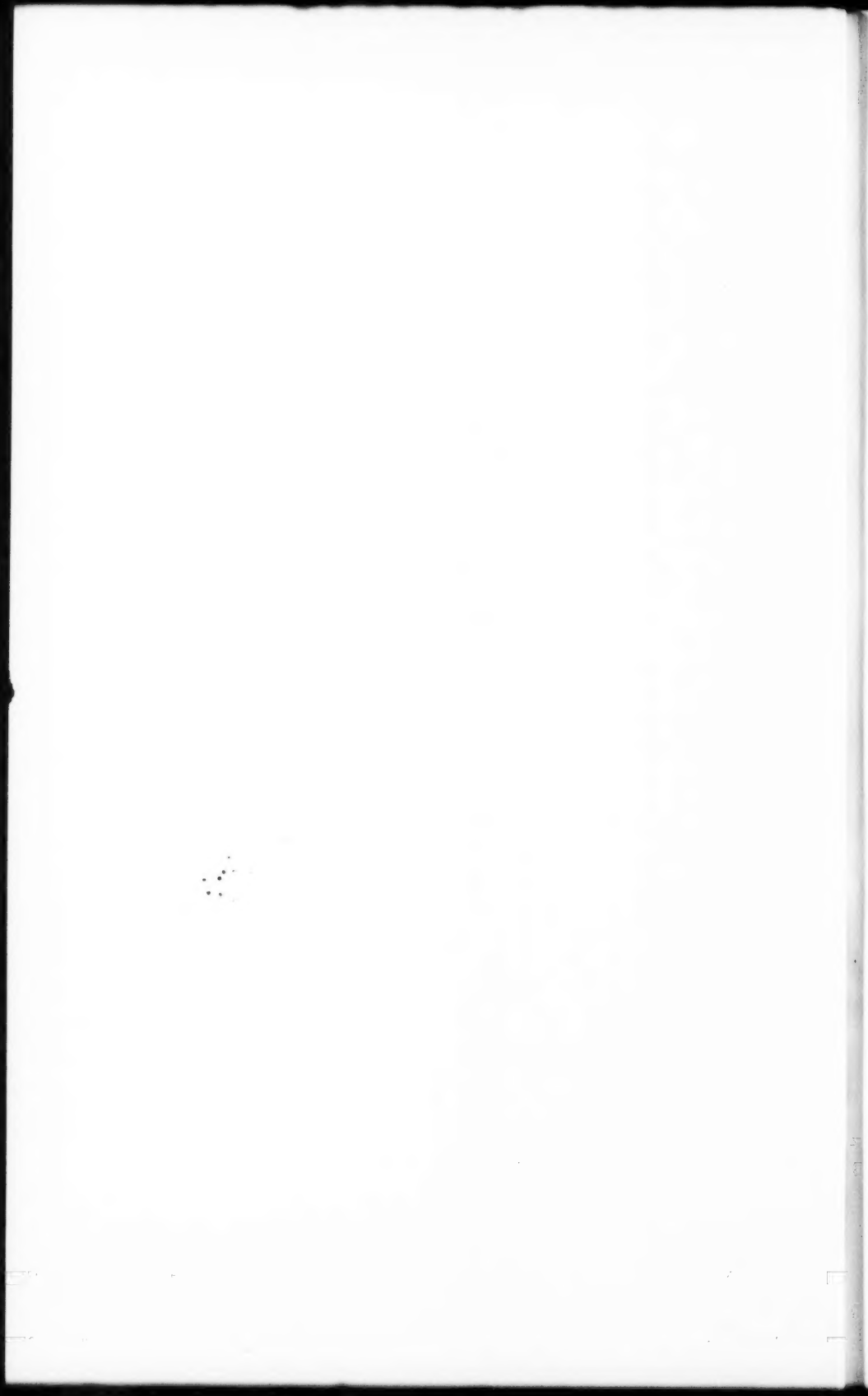
A JOURNAL DEVOTED TO THE
SCIENTIFIC AND ENGINEERING
ASPECTS OF ELECTRICAL
COMMUNICATION

EDITORIAL BOARD

J. J. CARTY	BANCROFT GIERARDI	F. B. JEWETT
E. B. CRAFT	L. F. MOREHOUSE	O. B. BLACKWELL
H. P. CHARLESWORTH	E. H. COLPITTS	H. D. ARNOLD
R. W. KING— <i>Editor</i> J. O. PERRINE— <i>Asst. Editor</i>		

VOLUME V
1926

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
NEW YORK



Index to Volume V

A

- Advances in Physics; The Atom Model, page 96. Ionization, page 463. *K. K. Darrow.*
- Alkali Metal Photoelectric Cell, The, *Herbert E. Ives*, page 320.
- Amplifiers, Load Carrying Capacity of, *F. C. Willis* and *L. E. Melhuish*, page 573.
- Anderson, S. E.*, Radio Signaling System for the New York Police Department, page 529.
- Antenna Arrays, Directive Diagrams of, *Ronald M. Foster*, page 292.
- Applications of Poisson's Probability Summation, *Frances Thorndike*, page 604.
- Atom Model, The; Some Contemporary Advances in Physics, *Karl K. Darrow*, page 96.

B

- Beck, C. J.*, and *C. F. Sacia*, The Power of Fundamental Speech Sounds, page 393.
- Bowen, Ralph, De Loss K. Martin* and *Ralph K. Potter*, Some Studies in Radio Broadcast Transmission, page 143.
- Bridge Polar Duplex Telegraph Circuits, Line Current Regulation in, *S. D. Wilburn*, page 625.

C

- Cables, Carrier-Current Communication on Submarine, *H. W. Hitchcock*, page 636.
- Carrier-Current Communication on Submarine Cables, *H. W. Hitchcock*, page 636.
- Carson, John R.*, Electric Circuit Theory and the Operational Calculus, page 50; page 336.
- Carson, John R.*, Wave Propagation in Overhead Wires with Ground Return, page 539.
- Circuits, Telegraph, Line Current Regulation in Bridge Polar Duplex, *S. D. Wilburn*, page 625.
- Circuit Theory and the Operational Calculus, Electric, *John R. Carson*, page 50; page 336.
- Circuits, Operation of Thermionic Vacuum Tube, *F. B. Llewellyn*, page 433.
- Control Charts, Quality, *W. A. Shechart*, page 593.
- Correction of Data for Errors of Averages Obtained from Small Samples, *W. A. Shechart*, page 308.
- Correction of Data for Errors of Measurement, *W. A. Shechart*, page 11.

D

- Darrow, Karl K.*, Some Contemporary Advances in Physics—the Atom Model, page 96. Ionization, page 463.
- Development and Application of Loading for Telephone Circuits, *Thomas Shae* and *William Fondiller*, page 221.
- Dielectric Constant of Sheet Insulating Materials, Electrode Effects in the Measurement of Power Factor and, *E. T. Hoch*, page 555.
- Directive Diagrams of Antenna Arrays, *Ronald M. Foster*, page 292.

E

- Electric Circuit Theory and the Operational Calculus, *J. R. Carson*, page 50;
page 336.
Electrode Effects in the Measurement of Power Factor and Dielectric Constant
of Sheet Insulating Materials, *E. T. Hoch*, page 555.
Errors of Averages Obtained from Small Samples, Correction of Data for,
W. A. Shewhart, page 308.
Errors of Measurement, Correction of Data for, *W. A. Shewhart*, page 11.
Extraneous Interference on Submarine Telegraph Cables, *J. J. Gilbert*, page 404.

F

- Fletcher, Harvey*, Theory of the Howling Telephone with Experimental
Confirmation, page 27.
Fondiller, William and *Thomas Shaw*, Development and Application of Loading
for Telephone Circuits, page 221.
Foster, Ronald M., Directive Diagrams of Antenna Arrays, page 292.
Früs, H. T., A Static Recorder, page 282.

G

- Gherardi, Bancroft* and *Robert W. King*, Joseph Henry—the American Pioneer
in Electrical Communication, page 1.
Gilbert, J. J., Extraneous Interference on Submarine Telegraph Cables, page 404.
Ground Return, Wave Propagation in Overhead Wires with, *John R. Carson*,
page 539.

H

- Harrison, H. C.* and *J. P. Maxfield*, Methods of High Quality Recording and
Reproducing of Music and Speech Based on Telephone Research, page 493.
Henry, Joseph—The American Pioneer in Electrical Communication, *Bancroft
Gherardi* and *Robert W. King*, page 1.
Hitchcock, H. W., Carrier-Current Communication on Submarine Cables, page
636.
Hoch, E. T., Electrode Effects in the Measurement of Power Factor and
Dielectric Constant of Sheet Insulating Materials, page 555.
Howling Telephone with Experimental Confirmation, Theory of the, *Harvey
Fletcher*, page 27.

I

- Insulating Materials, Electrode Effects in the Measurement of Power Factor
and Dielectric Constant of Sheet, *E. T. Hoch*, page 555.
Ionization, Contemporary Advances in Physics, *Karl K. Darrows*, page 463.
Ives, Herbert E., The Alkali Metal Photoelectric Cell, page 320.

K

- King, Robert W.* and *Bancroft Gherardi*, Joseph Henry—the American Pioneer
in Electrical Communication, page 1.

L

- Line Current Regulation in Bridge Polar Duplex Telegraph Circuits, *S. D.
Wilburn*, page 625.
Llewellyn, F. B., Operation of Thermionic Vacuum Tube Circuits, page 433.
Load Carrying Capacity of Amplifiers, *F. C. Willis* and *L. E. Melhuish*, page 573.
Loading for Telephone Circuits, Development and Application of, *Thomas Shaw
and William Fondiller*, page 221.

M

- Martin, De Loss K., Ralph Bowen and Ralph K. Potter, Some Studies in Radio Broadcast Transmission, page 143.*
Maxfield, J. P. and H. C. Harrison, Methods of High Quality Recording and Reproducing of Music and Speech Based on Telephone Research, page 493.
Measurement, Correction of Data for Errors of, W. A. Shevchart, page 11.
Measurement of Power Factor and Dielectric Constant of Sheet Insulating Materials, Electrode Effects in the, E. T. Hoch, page 555.
Melhuish, L. E. and F. C. Willis, Load Carrying Capacity of Amplifiers, page 573.
Methods of High Quality Recording and Reproducing of Music and Speech Based on Telephone Research, J. P. Maxfield and H. C. Harrison, page 493.
Music and Speech, Based on Telephone Research, Methods of High Quality Recording and Reproducing of, J. P. Maxfield and H. C. Harrison, page 493.

N

- Neutralization of Telegraph Crossfire, R. B. Shanck, page 418.*

O

- Operation of Thermionic Vacuum Tube Circuits, F. B. Llewellyn, page 433.*
Operational Calculus, Electric Circuit Theory and the, J. R. Carson, page 50; page 336.

P

- Photoelectric Cell, The Alkali Metal, Herbert E. Ives, page 320.*
Physics, Some Contemporary Advances in, The Atom Model, page 96. Ionization, page 463; Karl K. Darroto.
Poisson's Probability Summation, Applications of, Frances Thorndike, page 604.
Police Department, Radio Signaling System for the New York, S. E. Anderson, page 529.
Potter, Ralph K., Ralph Bowen and De Loss K. Martin, Some Studies in Radio Broadcast Transmission, page 143.
Power Factor and Dielectric Constant of Sheet Insulating Materials, Electrode Effects in the Measurement of, E. T. Hoch, page 555.
Power of Fundamental Speech Sounds, The, C. F. Sapia and C. J. Beck, page 393.
Probability Summation, Applications of Poisson's, Frances Thorndike, page 604.

Q

- Quality Control Charts, W. A. Shevchart, page 593.*

R

- Radio Broadcast Transmission, Some Studies in, Ralph Bowen, De Loss K. Martin and Ralph K. Potter, page 143.*
Radio Signalling System for the New York Police Department, S. E. Anderson, page 529.
Recording and Reproducing of Music and Speech Based on Telephone Research, Methods of High Quality, J. P. Maxfield and H. C. Harrison, page 493.

S

- Sacia, C. F. and C. J. Beck*, The Power of Fundamental Speech Sounds, page 393.
 Samples, Correction of Data for Errors of Averages Obtained from Small, *W. A. Shevchart*, page 308.
Shanck, R. B., Neutralization of Telegraph Crossfire, page 418.
Shaw, Thomas and William Fondiller, Development and Application of Loading for Telephone Circuits, page 221.
Shevchart, W. A., Correction of Data for Errors of Averages Obtained from Small Samples, page 308.
Shevchart, W. A., Correction of Data for Errors of Measurement, page 11.
Shevchart, W. A., Quality Control Charts, page 593.
 Speech Sounds, The Power of Fundamental, *C. J. Beck and C. F. Sacia*, page 393.
 Static Recorder, *A. H. T. Friis*, page 282.
 Submarine Cables, Carrier-Current Communication on, *H. W. Hitchcock*, page 636.
 Submarine Telegraph Cables, Extraneous Interference on, *J. J. Gilbert*, page 404.

T

- Telegraph Cables, Extraneous Interference on Submarine, *J. J. Gilbert*, page 404.
 Telegraph Circuits, Line Current Regulation in Bridge Polar Duplex, *S. D. Wilburn*, page 625.
 Telegraph Crossfire, Neutralization of, *R. B. Shanck*, page 418.
 Telephone Circuits, Loading for, Development and Application of, *Thomas Shaw and William Fondiller*, page 221.
 Telephone, Howling, Theory of the, with Experimental Confirmation, *Harvey Fletcher*, page 27.
 Theory of the Howling Telephone with Experimental Confirmation, *Harvey Fletcher*, page 27.
 Thermionic Vacuum Tube Circuits, Operation of, *F. B. Llewellyn*, page 433.
Thorndike, Frances, Applications of Poisson's Probability Summation, page 604.
 Transmission, Some Studies in Radio Broadcast, *Ralph Bowen, De Loss K. Martin and Ralph K. Potter*, page 143.

V

- Vacuum Tube Circuits, Operation of Thermionic, *F. B. Llewellyn*, page 433.

W

- Wave Propagation in Overhead Wires with Ground Return, *John R. Carson*, page 539.
Wilburn, S. D., Line Current Regulation in Bridge Polar Duplex Telegraph Circuits, page 625.
Willis, F. C. and L. E. Melhuish, Load Carrying Capacity of Amplifiers, page 573.

